Dr.Girish Kumar M.S.



Dr. Girishkumar M. S. obtained his Master's degree in Meteorology Sciences in 2003 from Cochin University of Science and Technology. He joined Indian National Centre for Ocean Information Services (INCOIS) in November, 2009. He was awarded with the Ph.D. degree in 2010 from Cochin University of Science and technology. Dr. Girishkumar, Scientist-D and In-charge of Ocean Observations stands out on his research works on (i) The variability of tropical cyclone activity over the Bay of Bengal and (ii) Understanding the upper ocean thermohaline structure and air-sea interaction process in the north Indian Ocean.

In addition he actively contributes to the operational activities of INCOIS like (i) The coordination of ocean observations using Argo floats, Drifters and scientific cruises in the Arabian Sea and Bay of Bengal (ii) Validation of model and model forcing fields in the tropical Indian Ocean.

He pointed out that for the accurate forecasts of tropical cyclones (formation, intensification and movement) it is necessary to consider El Niño/La Niña and Madden–Julian oscillation (MJO) individually as well as in combination. He clearly showed that the El Niño–Southern Oscillation (ENSO) and MJO phase together determine the characteristics of tropical cyclones in the Bay of Bengal during the primary tropical cyclone season (October-December).

He also showed that the number of monsoon depressions increased (decreased) significantly in the Bay of Bengal during the cold (warm) phase of Atlantic Zonal Mode (AZM). This result can be used for enhancing monsoon prediction skills, especially during non-ENSO years.

He has published over 26 papers in international peer-reviewed journals of high repute.

Dr. Girishkumar is awarded the Certificate of Merit for this outstanding contribution in the field of Ocean Science and Technology.